

RCL Circuits II

Name: _____ Section: 4BL-____ Date performed: ____/____/____

Lab station: _____ Partners: _____

Circuit box # _____ Oscilloscope # _____

Part C

$L =$ _____ $C =$ _____ $R_{\text{tot}} = R_L + R_{\text{gen}} =$ _____

Draw the circuit diagram:

Measure $(V_C)_{pp}$ at different frequencies between 1 kHz and 20 kHz. Be sure to include the resonance peak (i.e., maximum $(V_C)_{pp}$, as well as both half-maxima (i.e., both frequencies for which $(V_C)_{pp} = \frac{1}{2} \max(V_C)_{pp}$). Also measure the input amplitude $(V_S)_{pp}$ (do this *away* from resonance).

$(V_S)_{pp} =$ _____

f (kHz)	$(V_C)_{pp}$ (V)

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Plot frequency response curve on the next page.

Resonant frequency = _____

$f_{\text{osc}} =$ _____ (from Part A)

Percent difference = _____

FWHM = _____

